

Specifications for the Mobile Hybrid Electric Test Track Snowmaking System

Overall system:

1. Trailer mounted.
 - a. Pintle tow hook.
 - b. Tongue length
 - c. Trailer should be not greater than 25' in length, 7' wide or 12' high.
 - d. The trailer should be enclosed for freeze up re-thaw capability, with owner supplied heat.
 - e. Interior lighting inside enclosed trailer.
 - f. Enclosure mounted thermostatically controlled louvers for generator heat control.
 - g. Navy Blue exterior.
2. Pendant control.
 - a. Controls to operate the snowmaker from the truck cab for one-man operation.
 - b. Cables able to remain flexible in sub-zero (°F) temperatures.
3. Pump.
 - a. Inline pump to be rated for 100GPM.
 - b. Water supply pressure gauge shall be included.
 - c. Pump low water protection pressure switch.
4. Electrics
 - a. Main power distribution panel consisting of Square D components.
 - b. Main breaker with a Ground Fault Interruptor bottom feed.
 - c. NEMA 1 enclosure.
5. Generator
 - a. 60 KW capacity.
 - b. Common locally serviceable engine, (John Deer, Caterpillar, Perkins).
 - c. Turbocharged engine for high output in a small package.
 - d. No two-cycle diesel engines.
 - e. Exhaust extended outside of trailer enclosure.
 - f. Intake air drawn from inside of trailer.
 - g. Vibration isolators.
 - h. 200 gal fuel tank minimum.
 - i. Frequency meter, ammeter, voltmeter, hour meter, water temperature, and oil pressure minimum.
 - j. Fuel/Water separator.

Snowmaker:

1. Super Polecat snowmaker.
 - a. Three phase power 480V.
 - b. 25 HP. Blower fan
 - c. 30 total water nozzles for high snow production rates.
 - d. Built in oscillator for horizontal head rotation, adjustable.
 - e. Adjustable vertical head position.
 - f. Washable mesh filter.

- g. Adjustable snow production rates as high 140 GPM(min) or as low as 22 GPM of water depending upon weather.

Training:

1. Training for startup of system and operation.
2. On-site adjustments for unique environmental conditions.